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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/811,724	03/29/2004	Nebojsa Milanovich	7095-00	1411
23909 7590 05/18/2007 COLGATE-PALMOLIVE COMPANY 909 RIVER ROAD PISCATAWAY, NJ 08855			EXAMINER KILKENNY, PATRICK L	
			ART UNIT 3732	PAPER NUMBER
			MAIL DATE 05/18/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

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## Office Action Summary

Application No.

10/811,724

Applicant(s)

MILANOVICH ET AL.

Examiner

Patrick J. Kilkeny

Art Unit

3732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

Finality of the Office Action of August 2, 2006 is withdrawn based on the new rejection below (see new motivation to combine).

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7, 9, 10, 12-14, 17, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Montgomery'144 (US Patent No. 6,958,144) in view of Summers et al (US Patent No. 5,611).

Montgomery'144 discloses a method for whitening a dental surface comprising non-simultaneously applying a whitening composition to the surface, the whitening composition comprising an orally acceptable peroxy compound, and directing a volume of an activating composition on to the surface, wherein the activating composition comprises a peroxy compound activating effective amount of an orally acceptable basifying agent, and wherein applying the whitening composition and directing the activating composition are separated by an interval not greater than a peroxy compound activating effective interval (col. 3, lines 22-31, 46-48, 52-67; col. 4, lines 16-20; col. 4, line 64-col. 5, line 8; col. 10, line 61-col. 11, line 15). Montgomery'144 discloses that the activating composition raises the pH in the immediate environment of the dental

surface to a value of at least about 7 (col. 3, lines 22-31, 52-67; col. 4, line 64-col. 5, line 8). Montgomery'144 discloses that application of the whitening composition and directing of the activating composition are separated by an interval of not greater than one hour. Montgomery'144 also discloses that directing of the activating composition on to the dental surface precedes application of the whitening composition, and that directing of the activating composition on to the dental surface substantially immediately precedes application of the whitening composition (col. 4, line 64-col. 5, line 8).

Montgomery'144 discloses that the peroxy compound is hydrogen peroxide (col. 2, lines 2-6; col. 3, lines 46-48, 52-55). Montgomery'144 discloses that the activating composition is a liquid comprising the basifying agent in aqueous solution and that the basifying agent is an alkali metal carbonate salt (col. 4, line 64-col. 5, line 8; col. 11, lines 9-10). Montgomery'144 further discloses that the activating composition has a pH of about 8 to 12 (col. 10, line 61-col. 11, line 2). Montgomery'144 however, does not disclose that the activating composition is atomized.

Summers et al teach the application of an atomized composition to a dental surface for the purposes of tooth bleaching (col. 1, lines 51-67; col. 2, lines 51-64). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the whitening method of Montgomery'144 to create a dental whitening method that delivered an atomized activating composition to the dental surface since it is commonly know to apply dental and oral substances via small atomize spray bottles, such as antiseptic, and as taught by Summers et al.

Regarding claim 1, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize a delivery device with a maximum volume of 2.5 mL as the volume of activating composition available for application to the dental surface is an obvious matter of choice as this volume is limited by the volume of the delivering device chosen for the activating composition.

Regarding claims 6 and 7, it would have been an obvious to one having ordinary skill in the art at the time the invention was made to apply the activating composition after application of the whitening composition as this is merely a reversal of the order of known steps used.

Regarding claim 12, it would have been an obvious to one having ordinary skill in the art at the time the invention was made to direct a volume of about 25  $\mu$ L to 1 mL as the amount applied to the dental surface is a function of the amount needed to properly activate the whitening composition.

Regarding claim 19, it would have been an obvious to one having ordinary skill in the art at the time the invention was made to create a whitening kit containing the whitening composition and the atomizing dispensing container having the atomizable activating composition held within as it is well known in the art to combine the elements of a whitening process into a single kit for easy delivery to dental professionals.

Claims 8, 11, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Montgomery'144 in view of Summers et al as applied to claims 1 and 13 above, and further in view of Gaffar et al (US Patent No. 5,648,064). Montgomery'144 in view of Summers et al disclose a whitening method that shows the limitations as described

above; however, Montgomery'144 in view of Summers et al does not disclose the whitening composition as a mouthwash, dentifrice, oral strip, liquid whitener, or chewing gum, that the whitening composition comprises a peroxy compound in a total hydrogen peroxide amount of 0.1% to 10%, or that the activating composition comprises a cosolvent, mouth feel modifying agent, surfactant, preservative, sweetener, flavorant, or colorant.

Gaffar et al teach the whitening composition as a dentifrice and as a mouthwash (col. 4, lines 24-49; col. 6, lines 35-37). Gaffar et al also teach that the whitening composition comprises the peroxy compound in a total hydrogen peroxide equivalent amount of 0.1% to 10% by weight (col. 3, lines 30-53). Gaffar et al further teach the use of colorants, flavorants, and sweeteners (col. 5, lines 13-20, 61-62). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the whitening composition and activating composition of Montgomery'144 as modified by Summers et al to create a whitening composition of an appropriate chemical composition as well as in an easily applied medium, and to create an activating agent which yielded a more pleasant experience for the patient during use.

Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Montgomery'144 in view of Summers et al as applied to claim 13 above, and further in view of Banerjee et al (US Patent No. 6,485,709). Montgomery'144 in view of Summers et al disclose a whitening method that shows the limitations as described above; however, Montgomery'144 in view of Summers et al does not disclose the basifying agent as sodium bicarbonate.

Banerjee et al teach the use of sodium bicarbonate as a basifying agent, present in the range of 0.5% to 20% by weight sodium bicarbonate in a dental surface whitening method (col. 2, lines 51-63; col. 3, lines 4-23; col. 6, line 19-col.7, line 10; col. 7, lines 54-58). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the whitening composition and activating composition of Montgomery'144 as modified by Summers et al to create a suitable activating agent for speeding up the bleaching process.

### ***Response to Arguments***

Applicant's arguments filed January 3, 2007 have been fully considered but they are not persuasive.

The applicant argues that the combination of Summers with Montgomery would require the tooth bleaching composition of Montgomery to also be sprayed with the activating agent. However, like the applicant's invention, the steps of applying the activating agent and the bleaching composition are separated in Montgomery. The teaching of Summers et al. merely discloses an alternative and common way of dispensing dental/oral compositions in the mouth. The essential methodology and results of said methods of Montgomery are not altered by the combination, only the means in which the activating compound is applied.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

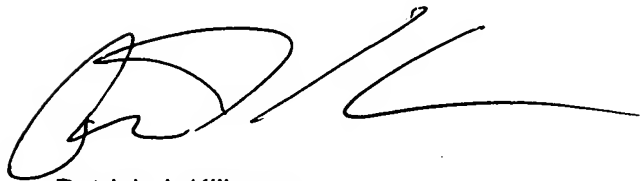
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick J. Kilkenny whose telephone number is (571) 272-8684. The examiner can normally be reached on Mon-Fri, 8-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Rodriguez can be reached on (571) 272-4964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read 'P. J. Kilkenny', with a long horizontal stroke extending to the right.

Patrick J. Kilkenny

A handwritten signature in black ink, appearing to read 'John J. Wilson', with a stylized, cursive script.

John J. Wilson  
Primary Examiner